**What is Claimed Is:**

1. A method of producing a transgenic avian comprising:

introducing into an avian cell a nucleic acid comprising a transgene, an integrase activity and a cationic polymer;

introducing the avian cell into a recipient avian wherein the recipient avian produces an offspring which includes the transgene,

thereby producing a transgenic avian.

2. The method of claim 1 wherein introducing the nucleic acid is done by a method selected from the group consisting of microinjecting, transfection, electroporation and lipofection.

3. The method of claim 1 wherein introducing the nucleic acid is done by microinjecting.

4. The method of claim 1 wherein an integrase protein is introduced into the cell.

5. The method of claim 1 wherein a nucleic acid encoding an integrase is introduced into the cell.

6. The method of claim 5 wherein the nucleic acid encoding integrase is mRNA.

7. The method of claim 1 wherein a nuclear localization signal is introduced into the cell.

8. The method of claim 7 wherein the nuclear localization signal is associated with the nucleic acid comprising a transgene.

9. The method of claim 7 wherein the nuclear localization signal is associated with the nucleic acid comprising a transgene by a chemical bond.

10. The method of claim 7 wherein the localization signal is associated with the nucleic acid comprising a transgene by an ionic bond.

11. The method of claim 1 wherein the transgene comprises a coding sequence which is expressed in a cell of the transgenic avian producing a polypeptide.

12. The method of claim 11 wherein the coding sequence is expressed in the blood of the transgenic avian.

13. The method of claim 11 wherein the coding sequence is expressed in the sperm of the transgenic avian.

14. The method of claim 11 wherein the polypeptide is present in egg white produce by the transgenic avian.

15. The method of claim 11 wherein the coding sequence is for a light chain or a heavy chain of an antibody.

16. The method of claim 15 wherein the antibody is a human antibody.

17. The method of claim 11 wherein the coding sequence is for a cytokine.

18. The method of claim 17 wherein the cytokine is interferon.

19. The method of claim 1 wherein the avian cell is an avian embryo cell.

20. The method of claim 1 wherein the avian cell is a cell of an early stage avian embryo comprising a germinal disc.

21. The method of claim 1 wherein the avian cell is an avian embryo cell selected from the group consisting of stage I avian embryo, stage II avian embryo, stage III avian embryo, stage IV avian embryo, stage V avian embryo, stage VI avian embryo, stage VII avian embryo, stage VIII avian embryo, stage IX avian embryo, stage X avian embryo, stage XI avian embryo and stage XII avian embryo.

21. The method of claim 1 wherein the avian cell is a cell of a stage X avian embryo.

22. The method of claim 1 wherein the cationic polymer comprises one or more compounds selected from the group consisting of polyethylenimine, polylysine, DEAE-dextran, starburst dendrimers and starburst polyamidoamine dendrimers.

23. The method of claim 1 wherein the cationic polymer comprises polyethylenimine.

24. The method of claim 1 wherein the avian is a chicken.

25. The transgenic avian produced according to claim 1.

26. An egg produced by a transgenic avian of claim 1.

27. The method of claim 1 wherein the method has an increased efficiency of transgenic avian production relative to an identical method without the integrase or cationic polymer.

28. A method of producing a transgenic avian comprising:

introducing into an avian cell a nucleic acid comprising a transgene, an integrase activity and a nuclear localization signal;

introducing the avian cell into a recipient avian wherein the recipient avian produces an offspring which includes the transgene,

thereby producing a transgenic avian.

29. The method of claim 28 wherein introducing the nucleic acid is done by a method selected from the group consisting of microinjecting, transfection, electroporation and lipofection.

30. The method of claim 28 wherein introducing the nucleic acid is done by microinjecting.

31. The method of claim 28 wherein an integrase protein is introduced into the cell.

32. The method of claim 28 wherein a nucleic acid encoding an integrase is introduced into the cell.

33. The method of claim 32 wherein the nucleic acid encoding integrase is mRNA.

34. The method of claim 28 wherein a nuclear localization signal is introduced into the cell.

35. The method of claim 34 wherein the nuclear localization signal is associated with the nucleic acid comprising a transgene.

36. The method of claim 34 wherein the nuclear localization signal is associated with the nucleic acid comprising a transgene by a chemical bond.

37. The method of claim 34 wherein the localization signal is associated with the nucleic acid by an ionic bond.

38. The method of claim 28 wherein the transgene comprises a coding sequence which is expressed in a cell of the transgenic avian producing a polypeptide.

39. The method of claim 38 wherein the coding sequence is expressed in the blood of the transgenic avian.

40. The method of claim 38 wherein the coding sequence is expressed in the sperm of the transgenic avian.

41. The method of claim 38 wherein the polypeptide is present in egg white produce by the transgenic avian.

42. The method of claim 38 wherein the coding sequence is for a light chain or a heavy chain of an antibody.

43. The method of claim 42 wherein the antibody is a human antibody.

44. The method of claim 38 wherein the coding sequence is for a cytokine.

45. The method of claim 44 wherein the cytokine is interferon.

46. The method of claim 28 wherein the cell is an avian embryo cell.

47. The method of claim 28 wherein the avian cell is a cell of an early stage avian embryo comprising a germinal disc.

48. The method of claim 1 wherein the avian cell is an avian embryo cell selected from the group consisting of stage I avian embryo, stage II avian embryo, stage III avian embryo, stage IV avian embryo, stage V avian embryo, stage VI avian

embryo, stage VII avian embryo, stage VIII avian embryo, stage IX avian embryo, stage X avian embryo, stage XI avian embryo and stage XII avian embryo.

49. The method of claim 28 wherein the avian cell is a cell of a stage X avian embryo.

50. The method of claim 28 wherein the cationic polymer comprises one or more compounds selected from the group consisting of polyethylenimine, polylysine, DEAE-dextran, starburst dendrimers and starburst polyamidoamine dendrimers.

51. The method of claim 28 wherein the cationic polymer comprises polyethylenimine.

52. The method of claim 28 wherein the avian is a chicken.

53. The transgenic avian produced according to claim 28.

54. An egg produced by a transgenic avian of claim 28.

55. The method of claim 28 wherein the method has an increased efficiency of transgenic avian production relative to an identical method without the integrase or nuclear localization signal.

56. A method of dispersing nucleic acid in a cell comprising:

introducing into a cell a nucleic acid and a dispersing agent in an amount that will disperse the nucleic acid in a cell

thereby dispersing nucleic acid in a cell.

57. The method of claim 56 wherein the cell is an avian cell.

58. The method of claim 56 wherein the cell is an embryo cell

59. The method of claim 56 wherein the nucleic acid includes a transgene.

60. The method of claim 56 wherein NLS or integrase activity is introduced into the cell.

61. The method of claim 57 including introducing the avian cell into a recipient avian wherein the recipient avian produces an offspring which includes the transgene,

62. The method of claim 56 wherein the dispersing is a homogeneous dispersing.

63. The method of claim 56 wherein the dispersing agent is a cationic polymer.

64. The method of claim 56 wherein the cationic polymer comprises one or more compounds selected from the group consisting of polyethylenimine, polylysine, DEAE-dextran, starburst dendrimers and starburst polyamidoamine dendrimers.

65. The method of claim 56 wherein the dispersing agent is polyethylenimine.